X-210-71-490
PREPRINT

CARRIER ACCOUNT UTILIZATION AT THE GODDARD SPACE FLIGHT CENTER

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JANUARY 1972

X-210-71-490

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GODDARD SPACE FLIGHT CENTER
Greenbelt, Maryland

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INTRODUCTION

The purpose of this paper is to document the system in use at Goddard Space Flight Center for the utilization of the Common Use Service Carrier Account and the R&D Inventory Carrier Account technique for budgeting, accounting, financial control, and management reporting, both for the individual functional area and on a Center-wide basis.

GODDARD SPACE FLIGHT CENTER — MISSION

The Goddard Space Flight Center, established in 1959 as the first major United States laboratory devoted to the investigation and exploration of space, conducts a wide-ranging program of experimentation in space sciences and space applications technology and operation of a world-wide tracking and data acquisition network. As a result, Goddard Space Flight Center has developed many diverse capabilities and requirements: i.e., management of complex satellite projects; the development of wholly integrated spacecraft, ranging from systems engineering to development and integration; the development of satellite tracking network; data acquisition and analysis; and scientific research which includes both theoretical studies and the development of many significant scientific experiments flown in satellites.

The majority of Goddard Space Flight Center's 4,200 personnel are located in Greenbelt, Maryland: other personnel are located at the Goddard Institute for Space Studies in New York City and throughout the world, managing the operations of satellite tracking and communications network stations.

The Goddard Space Flight Center is responsible for the development of the NASA sounding rocket program; the management of space applications programs, such as the Application Technology, Earth Resources Technology, and Nimbus satellites; the management of scientific satellite projects including the Small Astronomy Satellite Observatory (SAS), Orbiting Solar Observatory (OSO), Orbiting Astronomical Observatory (OAO), and explorer series; project management of NASA Delta Launch Vehicle; and management of a world-wide tracking and data acquisition network, in support of both manned and unmanned flights.

Goddard's annual budgetary requirements are approximately $600,000,000 of which $90,000,000 is authorized and funded from the Research and Program Management Appropriation (formerly the Administrative Operations Appropriation). Goddard's funding in research and development is divided into approximately 175 different NASA projects for which funds control must be maintained at the project level. Because of the numerous projects involved, Goddard's operation in selected areas dictates the utilizing of the Common Use Service Carrier Account, and R&D Inventory Carrier Account.

CONGRESSIONAL AUTHORIZATION

NASA authorization for use of Carrier Accounts was obtained from Public Law 89-473, 89 Statute 221, HR 6438 approved (PL) June 29, 1966.

NASA AUTHORIZATION

NASA Financial Management Manual Appendix 9310-1G, Agency-Wide Coding Structure, authorized field centers to utilize Common Use Service Carrier Accounts, in both the Research and Program Management and Research and Development Appropriations, and the R&D Inventory Carrier Account.

COMMON USE SERVICE CARRIER ACCOUNT — DEFINITION

This account will be used for initially financing common use contractual services limited to computer rentals, contractor-furnished support services involving technical support to in-house effort, art and graphic services, security services, and contract administration services. These services may be used by more than one research and development, research and program management, and construction of facilities project.

The Research and Development Common Use Service Carrier Account will be initially financed from the Research and Development Appropriation.

Adjustments will be made monthly as services are allocated or applied to the benefiting functional support activities, support of the construction program, research and development, or construction of facilities projects.

The net increase or decrease in undistributed service charges will be planned, budgeted, and funded against the benefited NASA Unique Project Number (UPN), i.e., OSO, ERTS, ATS, etc.

R&D INVENTORY CARRIER ACCOUNT — DEFINITION

This account will be used for initially financing common use supplies, materials, and non-capital equipment stock items from the R&D Appropriation, which may be used by more than one Research and Development, Research and Program Management, and Construction of Facilities Project.

Adjustments will be made monthly as items are withdrawn from inventory and applied to the benefited Functional Support Activities, Support of Construction Program, Research and Development or Construction of Facilities Projects.

This account will not be used for financing materials and supplies, and non-capital equipment purchased for a special purpose, which is chargeable directly to the Unique Project for which procured.

The net increase or decrease in inventory and related undelivered orders will be planned, budgeted, and funded against the benefited NASA Unique Project Number (UPN), i.e., OSO, ERTS, ATS, etc.

METHOD OF FINANCING

NASA's normal procedures for financing effort at field centers is divided into two separate operations — authorization and funding.

Authorization

NASA's system of authorization consists of the use of Resources Authority Warrants (NASA Form 506A) which are issued to Headquarters Program Offices and provide current fiscal year funding level authorization as requested by the Program Office Associate Administrator as evidenced by Project Operating Plans (NASA internal budgets). Upon receipt of this authorization, the Program Office authorizes funding levels to field centers for execution of their responsibility for the project. Resources Authority Warrants are very specific as to amounts authorized for each project and cannot be exceeded by field centers.

Funding

Based upon the Resources Authority Warrants (NASA Form 506A) issued to field centers by program offices for Research and Development, Research and Program Management, and Construction of Facilities, the NASA Headquarters Budget Office issues Allotment Authorizations (NASA Form 504), which may not equal the total Resources Authority Warrant issued to the field centers. It is

emphasized that the Resources Authority Warrants actually represent budgetary or funding level approval; whereas Allotment Authorizations authorize the incurrence of commitments and obligations.

Under normal NASA procedures, field centers must be in possession of both the Resources Authority Warrant and Allotment Authorization before any commitment or obligation of Government funds can occur. Normally, the Allotment Authorization is much smaller than the Resources Authority Warrant received, in that NASA management may approve the entire fiscal year operating budget for field centers but the Bureau of the Budget does not grant NASA all of the funds approved by Congress at the beginning of the fiscal year. By the end of the fiscal year, the Allotment Authorization will equal the amount of the Resources Authority Warrant.

Carrier Accounts

NASA's procedures do not require issuance of Resources Authority Warrants for use of Carrier Accounts: it does, however, require that sufficient Allotment Authorizations be available at the field center. In that Allotment Authorizations are not issued to field centers by the NASA Budget Office unless they are in receipt of Resources Authority Warrants, field centers must utilize a portion of the Allotment Authorization issued for financing those projects for which Resources Authority Warrants were issued. This tends to somewhat limit the utility of the Carrier Accounts even though NASA employs the "One Allotment Concept." The "One Allotment Concept" provides that regardless of which fiscal year Congress authorizes research and development or construction of facilities funds, they are available within a given appropriation (R&D or C of F) to fund any effort within that appropriation area for any fiscal year for which Resources Authority Warrants have been issued. For example, if Fiscal Year 1971 Research and Development Allotment has a residual balance (uncommitted) of $1,000,000, it is available for funding Research and Development Resources Authority Warrants received for Fiscal Year 1972.

CARRIER ACCOUNT SYSTEM UTILIZATION

Goddard utilizes the Carrier Account system for initial financing of six major functions within the Center. All six areas are financed from the Research and Development Allotment Authorization. Goddard has many projects with individual fund control levels necessitating the use of the Carrier Account concept if meaningful budgets or reporting is to be obtained from each area. The functional areas which use the Carrier Account concept are as follows:

Appendix A — Test Operations

Appendix B — Quality Assurances

Appendix C — Space Sciences Computer Operations

Appendix D — Fabrication Services

Appendix E — Technical Information Services

Appendix F — Store Stock and Magnetic Tape

NASA's appropriation for Research and Development does not authorize the charging of Government employees salaries, benefits, and travel: these costs are always charged to the Research and Program Management Appropriation. Goddard has historically budgeted all computer rentals under the Research and Program Management Appropriation; however, current policy requires that replacements or additional equipment required for present systems must be funded from the Research and Development appropriation with the exception of business data computers.

Background

The Carrier Account was established to permit the efficient funding of contractual services that are used by more than one of the Center functional organizations.

Prior to the use of the Carrier Account concept, some contracts were initially funded using many separate sources (individual job order numbers) and, when final costs were billed, it was found that the distribution did not correspond to the user distribution, thus necessitating frequent reprogramming and excessive paperwork. In some cases contracts were initially funded from the Research and Program Management Appropriation (administrative operations) where in reality the costs were incurred by research and development projects. This presented certain other administrative and funds control problems. The Carrier Account concept has not eliminated all problems but it has minimized them.

The Carrier Accounts are initially financed from the Research and Development Appropriation, and adjustments are made monthly as services under the various contracts are received by the using activity, which may be funded from the Research and Program Management, Research and Development, or Construction of Facilities Appropriations.

CONCLUSIONS

An effective and efficient operating system of utilizing the Carrier Account has been established at the Goddard Space Flight Center to provide management with a tool for sound fiscal management for six major functions.

The necessity to budget at numerous levels, corresponding establishment of job orders, and reporting has been greatly reduced by the use of these systems. All carrier accounts have been established within the existing NASA Financial System and has reduced to a minimum the amount of fiscal monitoring required.

ACKNOWLEDGMENT

K. B. Foster, former Financial Management Officer, made a significant contribution to this document through his efforts in initiating the utilization of Carrier Accounts at GSFC and their original documentation X-210-69-160.

Appendix A

TEST OPERATIONS

INTRODUCTION

The purpose of the Test Operations function is to plan, schedule, operate, and maintain facilities for testing and evaluating all spacecraft, including simulation of single and combined environment of acceleration, acoustics, shock, vibration, and vacuum encountered during launch and pre-launch and to maintain liaison with project managers of spacecraft on all aspects of the spacecraft which affect survival capability in the pre-launch, launch, and orbital environments.

It is the policy of Goddard Space Flight Center that costs (except Government salaries, benefits, and travel) of the Test Operations function be borne by the Research and Development users of the facilities since the primary purpose of this operation is to support the Research and Development Program of the Center.

BACKGROUND

Prior to the policy that test operations costs would be borne by the R&D user, the costs were charged to the Research and Program Management Appropriation. As Goddard's facilities became operational and greater dollar demands were placed upon this already constrained appropriation for operational financing, it became apparent that it was not Congress's intent to finance these operational costs under the Research and Program Management Appropriation. As currently authorized, the intent of the Research and Program Management Appropriation is to finance Government salaries, benefits, travel, and Center maintenance and repair. Previously, test managers would negotiate with each research and development project manager for additional budgetary approval to cover costs such as routine materials, liquid nitrogen, maintenance of equipments, magnetic tapes, etc. Normally, the project managers would provide some financial relief as well as suggestions as to how the test function should be performed. As a consequence, many job orders identified to many projects were established with small amounts of funding. Management and reporting of the cost of the Test Operations function were nearly impossible, and historical costs could not be obtained from the official Goddard accounting system. A single procurement action to finance a contractor to provide personnel to operate the test operations function might cite from 75 to 100 job orders and from 40 to 50 different research and development projects.

BUDGETING

Under the Common Use Service Carrier Account concept, the management of the Test Operations function is required to prepare a detailed operation budget for presentation to the Center Director and his staff, which includes all Directors of. This budget includes both dollar and manpower requirements and proposed dollar distribution to the research and development projects but does not include unique equipment which must be purchased to accomplish a test for a specific project. These requirements must be negotiated with each project manager. However, if the project manager refuses to fund the equipment, this is referred to the Director and his staff for final determination.

It is important to note that under the Carrier Account system project managers no longer have any say as to what level the Test Operations function will be maintained as this is a Center Management decision. Project managers do, however, have a voice in the number of persons, both civil service and contractor, that are assigned to their projects. This is of the utmost importance in that the amount of cost, or budgetary allocation, to be assigned each project is determined by dividing total Test Operations manpower into total test operations budget requirements times the number of persons assigned to the project.

COSTS FINANCED

All of the following costs associated with Test Operations are financed by use of the Carrier Account:

Materials and Supplies
Liquid Nitrogen
Solar Simulator Lamps
Magnetic Tapes
On-Site Contractor Support
Maintenance and Repairs
Fabrication Services
Technical Information Services

COSTS EXCLUDED

All costs associated with Government salaries, benefits, and travel, are excluded from the Common Use Service Carrier Account. These costs are charged to the Research and Program Management Appropriation. The cost of unique equipment for which the project test requirement dictates is also excluded from the Common Use Service Carrier Account. The cost of such equipment is charged directly to the project which had the requirement.

CENTER MANAGEMENT REVIEW/APPROVAL AND PROJECT ASSESSMENT

Every June and December management of the Test Operations function presents its budget requirements to the Director and Directors of for review/modification and approval. Project managers who may disagree with the manpower distribution as well as Center budgetary personnel are present at this review.

Upon final approval by the Director, the Financial Management Officer is requested to advise all project managers of the budgetary allocation being levied upon their project and to ensure that these amounts are included in the research and development project budget. Project managers may not reprogram/revise these budgeted amounts without signed concurrence of the Chief of the Test and Evaluation Division.

FUND AUTHORIZATION

As discussed previously under "Method of Financing," page 3, NASA's financial system does not require receipt from Headquarters of Resources Authority Warrants (NASA Form 506A) but authorizes field centers to finance costs of Common Use Service Carrier Accounts from residual or available Allotment Authorizations (NASA Form 504). NASA's financial procedures do, however, require that all research and development-funded Carrier Accounts be identified by a unique project number (UPN). In Goddard's case, we must use Unique Project Number 697 for research- and development-financed Carrier Accounts for common services. In order to distinguish each of our functions in the Common Use Service Carrier Account, we have assigned two additional digits to the account number; i.e., Common Use Service Carrier Account UPN 697-__, Test Operations UPN 697-06.

Goddard's financial system requires job order budgets in detail to be submitted in the amount of the budget approved by the Director. Immediately upon approval of the budget by the Director, the job order allocations are updated to reflect the revised annual amounts approved. At the same time, in the beginning of the fiscal year disbursements for half of the fiscal year are recorded against the research and development projects that are responsible for all costs of Test Operations. Early in January, the balance of the year's total assessment will be recorded as a disbursement against the research and development projects to equal the total year's allocated costs.

METHOD OF DISTRIBUTION

The method used to distribute costs to the research and development projects is budgeted manpower of the Test Operations Government and contractor on-site personnel. Twice each fiscal year at budget time the Test Operations personnel discuss manpower requirements with project managers. Based upon these discussions the test operations budget is distributed to each project. For example, if the OAO Project usage projection is 10% of the Test Operations total direct manpower (both civil service and on-site contractor support), the OAO Project is allocated 10% of the Test Operations direct budget. This percentage will remain until the next budget review and approval cycle.

FISCAL TRANSACTIONS

Funds are disbursed against the R&D projects during the first week in July and early in January for the purpose of reserving Resources Authority Warrants (506A) to cover the costs of the Test Operations operation during the fiscal year. Since this disbursement against the R&D projects is actually a reserve, an offsetting entry is needed so that the Center's disbursements are not overstated, this offsetting entry is made in the FMD Reciprocal Account (210-697-06).

During the fiscal year all fiscal transactions (Commitments, Obligations, Disbursements) associated with Test Operations are processed through the Test Operation carrier account.

At the end of the fiscal year, or when all the Test Operation costs for the fiscal year have been disbursed the Test Operation carrier account will be closed out against the FMD reciprocal account. After the accounts have been closed out, one to the other, the fiscal records will show the Test Operation costs reflected against the R&D projects only.

MANAGEMENT REPORTING

Management reporting has greatly improved since the utilization of the Carrier Account and the assignment of a separate UPN 697-06 for Test Operations. All costs related to Test Operations are identified to UPN 697-06 and to the job order to which the requirement was budgeted. The number of job orders have been reduced drastically, and the necessity to cite many job orders on one procurement request has been eliminated. Weekly job order status reports are received by Test Operations management, and monthly a correlation is provided in detail of budget, commitments, and obligations for analysis of action not

accomplished on schedule. The report provided for this detail analysis is entitled "Fiscal Status of the Budget." For further information relating to this report, see GSFC document X-210-67-80, "Budget Execution and Review at the Goddard Space Flight Center," dated February 1967. A typical status report is reproduced below.

TEST OPERATIONS — CARRIER ACCOUNT
FINANCIAL STATUS — FISCAL YEAR 1972
AS OF NOVEMBER 1971

		Description	Allocation	Total Commitment	Available
697-06-01-XX					
	10	320 Branch Routine	15,000	312	14,688
	11	321 Branch Routine	146,000	91,300	54,700
	12	322 Branch Routine	133,000	49,071	83,929
	14	324 Branch Routine	56,000	19,975	36,025
	15	325 Branch Routine	86,000	43,692	42,308
	18	328 Branch Routine	93,000	39,771	53,229
	20	Stores Stock	175,000	89,475	85,525
	21	Liquid Nitrogen	250,000	125,000	125,000
	24	TID	47,000	15,029	31,971
	25	Fabrication - Direct	180,000	50,603	129,397
	26	Fabrication - Upgrading	85,000	14,128	70,872
	27	Fabrication - Maintenance	35,000	22,379	12,621
	28	Contract Maintenance	98,000	60,612	37,388
	29	MS&SD Support	47,000	45,664	1,336
	30	Mission Support	2,199,000	1,115,015	1,083,985
	31	Mission Support - Phase-In	108,000	- 0 -	108,000
	32	POMD Support	25,000	- 0 -	25,000
	33	Cleaning	55,000	- 0 -	55,000
	34	Equip. - Repair and Alt.	208,000	86,210	121,790
	35	Guard Support	15,000	1,500	13,500
	42	Quick Reaction Proc.	23,000	6,189	16,811
290	35	POMD - T&E Division	163,000	115,855	47,145
	77	Lease Computer Equip.	15,000	13,776	1,224
	78	Purchase - ADP Equip.	490,000	487,724	2,276
		Total	4,747,000	2,493,280	2,253,720

Appendix B

QUALITY ASSURANCE

INTRODUCTION

The purpose of the Quality Assurance function is to devise programs, plans, and procedures for ensuring quality of spacecraft components and includes: reviewing and monitoring quality assurance efforts at contractor plants; developing and disseminating statistical and technical data on failure causes; identifying nature and prevention of failures; operating laboratory facilities to determine failure modes and causes; assisting project managers and contractors in interpretation of NASA's quality assurance documents and technique manuals for use and intent; and maintaining the central point of contact within Goddard for reporting, disseminating and receiving parts and material malfunction data that is of NASA-wide interest.

It is the policy of Goddard Space Flight Center that the costs (except government salaries, benefits, travel, and computer rentals) of the Quality Assurance function will be borne by the research and development users.

BACKGROUND

Prior to the policy that the cost of quality assurance functions would be borne by the R&D user the costs were charged to the Research and Program Management Appropriation. As Goddard's facilities became more fully operational and greater dollar demands were placed upon this constrained appropriation it became apparent that it was not Congress's intent to finance these operational costs under the Research and Program Management Appropriation. Accordingly, NASA established the policy that, to the maximum extent possible, Quality Assurance costs should be related to the using research and development projects. Since all services of the Quality Assurance function were for support of spacecraft and Tracking and Data Equipment, a decision was made to finance the costs under the Carrier Account and allocate costs to research and development projects and Tracking and Data based upon their budgets.

BUDGETING

Under the Common Use Service Carrier Account concept, the management of the Quality Assurance function is required to prepare twice each fiscal year a detail operating budget for presentation to the Director and his staff.

It is important to note that although research projects ultimately bear the entire costs of the Quality Assurance function, except government salaries, benefits, travel, and computer rentals, project managers have no say as to total dollars budgeted. The distribution of dollars is reserved for the Director and his staff. (See method of distribution below.)

COSTS FINANCED

All of the following costs associated with the Quality Assurance function are financed initially by use of the Common Use Service Carrier Account with ultimate charges to the research and development projects:

Materials and Supplies
On-Site Contractor Support
Equipment
Equipment Maintenance
Instrument Repair and Maintenance
Fabrication Services
Technical Information Services

COSTS EXCLUDED

All costs associated with government employees salaries, benefits, travel, and computer rentals for the Quality Assurance function are excluded from financing under the Carrier Account. These costs are charged to the Research and Program Management Appropriation.

CENTER MANAGEMENT REVIEW/APPROVAL/ASSESSMENT

Every June and December, management of the Quality Assurance function presents its budget requirements to the Director and Directors of for review/ modification and approval.

Upon final approval by the Director, the Financial Management Officer is requested to advise all project managers of the budgetary allocation levied upon their project and to ensure that these amounts are included in the research and development project budget. Project managers may not reprogram/revise these budgeted amounts without signed concurrence of the Chief of the Quality Assurance Division.

FUND AUTHORIZATION

As discussed previously under "Method of Financing," page 3, NASA's financial system does not require receipt from Headquarters of Resources Authority Warrants (NASA Form 506A) but authorizes field centers to finance costs of Common Use Service Carrier Accounts from residual or available Allotment Authorizations (NASA Form 504). NASA's financial procedures do, however, require that all research- and development-funded Carrier Accounts be identified by a unique project number. In Goddard's case, we must use Unique Project Number 697 for research- and development-financed Carrier Accounts for common services. In order to distinguish each of our functions in the Common Use Service Carrier Account, we have assigned two additional digits to the account number; i.e., Common Use Service Carrier Account UPN-697, Quality Assurance UPN 697-07.

Goddard's financial system requires job order budgets in detail to be submitted in the amount of the budget approved by the Director. Immediately upon approval of the budget by the Director, the job order allocations are updated to reflect the revised annual amounts approved. At the same time, disbursements for half of the fiscal year are recorded against the research and development projects that are responsible for all costs of the Quality Assurance function.

METHOD OF DISTRIBUTION

The method used to distribute costs of the Quality Assurance function to research and development projects is based upon the percentage of each flight project's dollar budget for the Physics and Astronomy Program, the Communications Program, the Earth Observation Program, the Delta Project Improvement Budget, and 50% of the Tracking and Data Equipment Budget, excluding NASCOM equipment, to the total of all budgets for the same programs and projects. Based upon this mathematical compilation, the approved budget is distributed or allocated to the applicable research and development projects/program. For example, if the

OAO total budget represents 10% of all the above budgets, the OAO project is allocated 10% of the total Quality Assurance budget. This allocation will remain until the next budget cycle when the allocation will be updated, if necessary.

FISCAL TRANSACTIONS

Funds are disbursed against the R&D projects during the first week in July and early in January for the purpose of reserving Resources Authority Warrants (506A) to cover the costs of the Quality Assurance operation during the fiscal year. Since this disbursement against the R&D projects is actually a reserve, an offsetting entry is needed so that the Center's disbursements are not overstated, this offsetting entry is made in the FMD Reciprocal Account (210-697-06).

During the fiscal year all fiscal transactions (Commitments, Obligations, Disbursements) associated with Quality Assurance are processed through the Quality Assurance carrier account.

At the end of the fiscal year, or when all the Quality Assurance costs for the fiscal year have been disbursed the Quality Assurance Carrier account will be closed out against the FMD reciprocal account. After the accounts have been closed out, one to the other, the fiscal records will show the Quality Assurance costs reflected against the R&D projects only.

MANAGEMENT REPORTING

Management reporting of the costs of Quality Assurance function has greatly improved with the financing of the function by utilization of the Carrier Account and the establishment of a separate unique project number for the function 697-07.

All costs related to the Quality Assurance function are initially charged to Unique Project Number 697-07 and not to the multiple projects which ultimately accept the costs. The number of job orders, therefore, has been reduced drastically. As a consequence, the requirement to cite many job orders on a single procurement request has been eliminated.

Complete financial status can be presented on one page. A typical status report appears on the following page.

RELIABILITY AND QUALITY ASSURANCE CARRIER ACCOUNT
FINANCIAL STATUS — FISCAL YEAR 1972
AS OF NOVEMBER 1971

	Description	Allocation	Total Commitment	Available
697-07-01-XX				
31	POMD	15,000	4,804	10,196
36	Outside Vendor Repair	150,000	38,458	111,542
60	Functional Support	968,000	485,075	482,925
61	Functional Support - Phase-In	87,000	- 0 -	87,000
62	TID	13,000	6,283	6,717
63	Fabrication	6,000	2,914	3,086
64	Instrument Repair Service	54,000	- 0 -	54,000
65	Equipment Maintenance	25,000	175	24,825
66	PPL Development	80,000	80,000	- 0 -
67	Parts Branch Routine	48,000	8,226	39,774
68	Failure Analysis Routine	25,000	2,908	22,092
69	Incoming Test Routine	22,000	6,467	15,533
70	Test Equip. Maint. and Repair	20,000	513	19,487
71	QE Branch Routine	1,000	120	880
72	Store Stock - Div.	2,000	20	1,980
73	Store Stock - Q.E. Branch	2,000	634	1,366
74	Store Stock - T.E.M.R. Parts	10,000	5,906	4,094
75	Store Stock - Incoming Test	7,000	3,237	3,763
76	Store Stock - Parts Branch	12,000	1,427	10,573
77	Store Stock - Film	8,000	4,356	3,644
	Total	1,555,000	651,523	903,477

Appendix C

SPACE AND EARTH SCIENCES DIRECTORATE COMPUTER SUPPORT

INTRODUCTION

The purpose of the Space and Earth Sciences Directorate Computer Support is to provide computing support for the theoretical research programs of the Center through the operations and programming of one IBM 7094, one IBM 360/75, and one IBM 360/91 computer. In addition assistance is provided in the space sciences area in the analysis and preparation of data reduction programs. Computer support is provided in three different physical locations throughout the Center.

It is the policy of Goddard Space Flight Center that the cost of operation of the Space and Earth Sciences Directorate Computer Support, except for government salaries, benefits, travel, and computer rentals, will be borne by the Research and Development Flight Projects of the Physics and Astronomy and Space Applications Programs and the Delta Project.

BACKGROUND

Prior to the policy that the cost of computer support of this type would be borne by the R&D user, the costs were charged to the Research and Program Management Appropriation for computer rentals, maintenance, and partially for supplies and materials, operations, and programming. Additional funds required in support of research and development were identified to research and development projects. This system proved unreasonable in that only a few projects were being charged while many received the services of the Space and Earth Sciences Directorate Computer Support without charges. As Goddard's facilities became more fully operational and greater demands were placed upon this already constrained appropriation, it became apparent that it was not the intent of Congress to finance these operational costs under the Research and Program Management Appropriation. Accordingly, NASA established the policy that, to the maximum extent possible, computer support costs should be related to the using research and development projects. Since all Directorate Computer Support services were for support of research and development, Goddard decided to finance all costs except salaries, travel, and computer rentals under the Carrier Account and to allocate costs to research and development projects.

BUDGETING

Under the Common Use Service Carrier Account concept, the management of the Space and Earth Sciences Directorate Computer Support is required, semi-annually, to prepare detailed operating budgets for presentation to the Director and his staff.

It is important to note that although flight project managers of the Physics and Astronomy and Space Applications Programs and the Delta Project will ultimately bear the entire costs of Space and Earth Sciences Directorate Computer Support (except government salaries, benefits, travel, and computer rentals), project managers have no say as to the total budget or dollar distribution or budgetary allocation of cost to their projects, this is reserved for the Director and his Staff. (See Method of Distribution below.)

COSTS FINANCED

All of the following costs associated with the Space and Earth Sciences Computer Support Function are initially financed by use of the Common Use Service Carrier Account with ultimate charge to research and development flight projects:

Maintenance of Computers
Operations of Computers
Supplies
System Programming
Remote Terminal Communications

COSTS EXCLUDED

All costs associated with government employees salaries, benefits, travel, and computer rentals are excluded from financing under the carrier account. These costs are charged to the Research and Program Management Appropriation.

CENTER MANAGEMENT REVIEW/APPROVAL/ASSESSMENTS

Every June and December, management of the Space and Earth Science Computer Support function presents its budget requirements to the Director and his staff. Upon final approval of the budget by the Director, the Financial Management Officer is requested to advise all flight project managers of the Physics and

Astronomy and Space Applications Programs and the project manager of the Delta Project of the budgetary allocation being imposed upon each project and to insure that these allocations are included in their final budget.

Project managers may not reprogram/revise these budgeted amounts without the signature/concurrence of the Director of Space and Earth Sciences.

FUND AUTHORIZATION

As discussed previously under "Method of Financing," page 3, NASA's financing system does not require receipt from Headquarters of Resources Authority Warrants (NASA Form 506) but authorizes field centers to finance costs of Common Use Service Carrier Accounts from residual or available Allotment Authorizations (NASA Form 504). NASA's financial procedures do, however, require that all research- and development-funded carrier accounts be identified by a unique project number. In Goddard's case, we must use Unique Project Number 697 for research and development financed carrier accounts for common services. In order to distinguish each of our functions in the Common Use Service Carrier Account, we have assigned two additional digits to the account number; i.e., Common Use Service Carrier Account UPN 697-__, Space and Earth Sciences Directorate Computer Support UPN 697-04.

Goddard's financial system requires job order budgets in detail to be submitted in the amount of the budget approved by the Director. Immediately upon approval of the budget by the Director, the job order allocations are updated to reflect the revised annual amounts approved. At the same time, disbursements for half of the fiscal year are recorded against the research and development projects that are responsible for all costs of the Space and Earth Sciences Directorate Computer Support.

METHOD OF DISTRIBUTION

The method used to distribute costs of the Space and Earth Sciences Directorate Computer Support function to research and development projects is based upon the percentage of each flight project's dollar budget for the Physics and Astronomy Program, Space Applications Program and Delta Project to the total of all flight projects for the same programs and projects. Based upon this mathematical compilation, the approved budget is distributed or allocated to the applicable research and development projects. For example, if the OAO total budget represents 10% of all the flight projects, the OAO Project is allocated 10% of the total Space and Earth Sciences Directorate Computer Support budget. This allocation

will remain until the next budget cycle when the allocation will be updated, if necessary.

FISCAL TRANSACTIONS

Funds are disbursed against the R&D projects during the first week in July and early in January for the purpose of reserving Resources Authority Warrants (506A) to cover the costs of the Space and Earth Sciences Directorate Computer Support operation during the fiscal year. Since this disbursement against the R&D projects is actually a reserve, an offsetting entry is needed so that the Center's disbursements are not overstated, this offsetting entry is made in the FMD Reciprocal Account (210-697-06).

During the fiscal year all fiscal transactions (Commitments, Obligations, Disbursements) associated with Space and Earth Sciences Directorate Computer Support are processed through the Space and Earth Sciences Directorate Computer Support carrier account.

At the end of the fiscal year, or when all the Space and Earth Sciences Directorate Computer Support costs for the fiscal year have been disbursed the Space and Earth Sciences Directorate Computer Support carrier account will be closed out against the FMD reciprocal account. After the accounts have been closed out, one to the other, the fiscal records will show the Space and Earth Sciences Directorate Computer Support costs reflected against the R&D projects only.

MANAGEMENT REPORTING

Management reporting of the costs of the Space and Earth Sciences Directorate Computer Support function has greatly improved with the financing of the functions by utilization of the Carrier Account and establishment of a separate unique project number for the function 697-04.

All costs related to the Space and Earth Sciences Directorate Computer Support functions are initially charged to UPN 697-04 and not to the multiple projects which ultimately accept the costs. The number of job orders, therefore, has been greatly reduced. As a consequence, the requirement to cite many job orders on a single procurement request has been eliminated.

Complete financing status can be presented on one page. See next page for typical status report.

SPACE AND EARTH SCIENCES DIRECTORATE COMPUTER
SUPPORT — CARRIER ACCOUNT
FINANCIAL STATUS — FISCAL YEAR 1972
AS OF NOVEMBER 1971

	Description	Allocation	Total Commitment	Available
697-04-01-XX				
01	SESD Computer Maint.	358,000	352,082	5,918
02	SESD Computer Oper.	489,000	466,000	23,000
03	SESD Computer Supplies	217,000	89,465	127,535
04	SESD Computer Programming	215,000	98,183	116,817
05	Computer Site Preparation	40,000	2,018	37,982
06	Computer Data Set Service	35,000	35,000	- 0 -
07	SESD Computer Equipment	42,000	- 0 -	42,000
	Total	1,396,000	1,042,748	353,252

Appendix D

FABRICATION SERVICES

INTRODUCTION

The mission of the Experimental Fabrication and Engineering Division is to plan and direct fabrication engineering and supporting developmental fabrication functions for the construction of aerospace experimental, prototype, flight, and laboratory equipment. All Fabrication Services required by the Center must be approved by this division, although all work may not be performed on-site.

It is the policy of Goddard Space Flight Center that (1) operational costs of the Fabrication Services function be borne by the users of the function, (2) research and development performed by personnel of the Experimental Fabrication and Engineering Division be financed by research and development supporting research projects and not included in the operations costs of fabrication services, and (3) Government salaries, benefits, travel, and computer rentals will not be included in operational costs.

BACKGROUND

Prior to the policy stated above, costs associated with Fabrication Services were charged to both Research and Development and Research and Program Management Appropriations. As Goddard's facilities became more fully operational and greater dollar demands were placed upon an already constrained appropriation, it became apparent that it was not the intent of Congress to finance these operational costs under the Research and Program Management Appropriation. However, prior to the policy statement, costs of Fabrication Services were financed out of the Research and Program Management Appropriation for costs incurred at Goddard and by Research and Development Appropriation if the work was performed off-site; e.g., if Fabrication Services were performed in-house (at GSFC), all costs were borne by the Research and Program Management Appropriation, and if the services were contracted out, the Research and Development Appropriation was charged fully for the contracted services. This system was corrected by financing Fabrication Services fully from research and development through the Carrier Account and charging all customers, based on an hourly rate, regardless of whether the services were performed in-house or by a contractor off-site.

BUDGETING

Under the Common Use Services Carrier Account concept, the management of the Fabrication Service function is required to prepare a detailed operation budget for presentation to the Director of Administration and Management each semiannual budget period. This budget includes both dollar and manpower requirements and proposed dollar rate per hour for distribution to the using appropriation for services to be rendered.

COSTS FINANCED

All of the following costs associated with Fabrication Services are financed by use of the Carrier Account:

Materials and Supplies
Contractual Services
On-Site Contract Support
Equipments
Test Operation Services
Technical Information Services

COSTS EXCLUDED

All costs associated with Government salaries, benefits, travel, and computer rentals are excluded from the Common Use Service Carrier Account. These are charged to the Research and Program Management Appropriation.

CENTER MANAGEMENT REVIEW/APPROVAL

Every June and December, management of the fabrication services function presents its budget requirements to the Director of Administration and Management for review/modification and approval.

FUND AUTHORIZATION

As discussed previously under "Method of Financing," page 3, NASA's financing system does not require receipt from Headquarters of Resources Authority Warrants (506's) but authorizes field centers to finance costs of Common Use Service Carrier Accounts from residual or available Allotment Authorizations

(504's). NASA's financial procedures do, however, require that all research and development funded Carrier Accounts be identified by a unique project number (UPN). In Goddard's case, we must use Unique Project Number 697 for research- and development-financed Carrier Accounts for common use services. In order to distinguish each of our functions in the Common Use Service Carrier Account, we have assigned two additional digits to the account number; i.e., Common Use Service Carrier Account UPN 697-__, Fabrication Services UPN 697-02.

Goddard's financial system requires job order budgets in detail to be submitted in the amount of the budget approved by the Director. Immediately upon approval of the budget by the Director, the job order allocations are updated to reflect the revised annual amounts approved.

DESCRIPTION OF FAB CARRIER ACCOUNT OPERATION

Step I

FMD sets up an allocation for Fab based on budget estimates.

Step II

Fab in the beginning of the fiscal year, or as required, initiates the following Procurement Requests:

a. Blanket procurement to cover Fab work to be performed off-site by work order.

b. Procurement Requests to purchase supplies, materials, and/or equipmert for performance of the in-house work.

Step III

Accounting receives the above PR's, commits the funds against the Fab Carrier Account, and forwards the PR's to Procurement.

Note: The PR's received by Procurement are as follows:

a. Standard Procurement Request or Purchase Request for supplies, materials and/or equipment for operation of the in-house Fab effort.

b. Blanket PR for funding of off-site Fab work orders.

c. Blanket Purchase Agreements (BPS's) for off-site Fab work (Quick Reaction Work under $1,000).

d. Standard Competitive Procurement for off-site Fab work (Non-Quick Reaction Work over $1,000).

e. Off-site Fab work orders (Quick Reaction over $1,000).

Procurement types A through D are processed through the fiscal system before being received by Procurement. All funds committed on these documents are committed against the Fab Carrier Account.

Procurement type E is received by Procurement directly from Fab. The funds have been committed on Procurement type B above.

Step IV

The Procurement Division having received the PR's mentioned in Step II will do the following:

a. Hold the blanket PR since this document simply makes funds available for off-site Fab work orders which will be received at a later date.

b. Procure the supplies, materials and/or equipment cited on the procurement request for operation of the in-house effort.

Step V

Procurement having placed the orders for the supplies, materials, and/or equipment will forward to Accounting a copy of the Purchase Order and Accounting will obligate the funds against the carrier account.

Step VI

Code 400 initiates a Fab Work Request (Quick Reaction over $1,000).

Step VII

Fab receives the request; they then:

a. Prepare Workload Record Form.

b. Determine whether the work is to be done in-house or on contract.

c. Make an estimate of the cost to do the work.

d. Send the Workload Record Form to Accounting to certify availability of funds.

Step VIII

Accounting processes the Workload Record Form and if funds are available, commits them and returns the Workload Record Form to Fab, noting funds are available to perform the work. If funds are not available the Workload Record Form is returned to Fab stating such.

Step IX

Fab receives the Workload Record Form back from Accounting and:

a. If funds are available and the work is to be done in-house, they perform the work.

b. If funds are available and the work is to be done out-of-house (Quick Reaction over $1,000) they initiate an off-site Fab work order. The work order is sent directly to Procurement.

Step X

Procurement upon receipt of the work order:

a. Selects 3 contractors from active list of contractors for bids.

b. Receives firm fixed price bids.

c. Awards contract.

d. Sends obligation document to Accounting.

Step XI

Accounting, upon receipt of the obligation document, obligates the funds against the carrier account.

Note: The funds are de-committed off the blanket PR.

Step XII

The contractor bills for the supplies, materials, and/or equipment which had been delivered. Accounting processes the voucher and disburses the funds from the Fab Carrier Account.

Step XIII

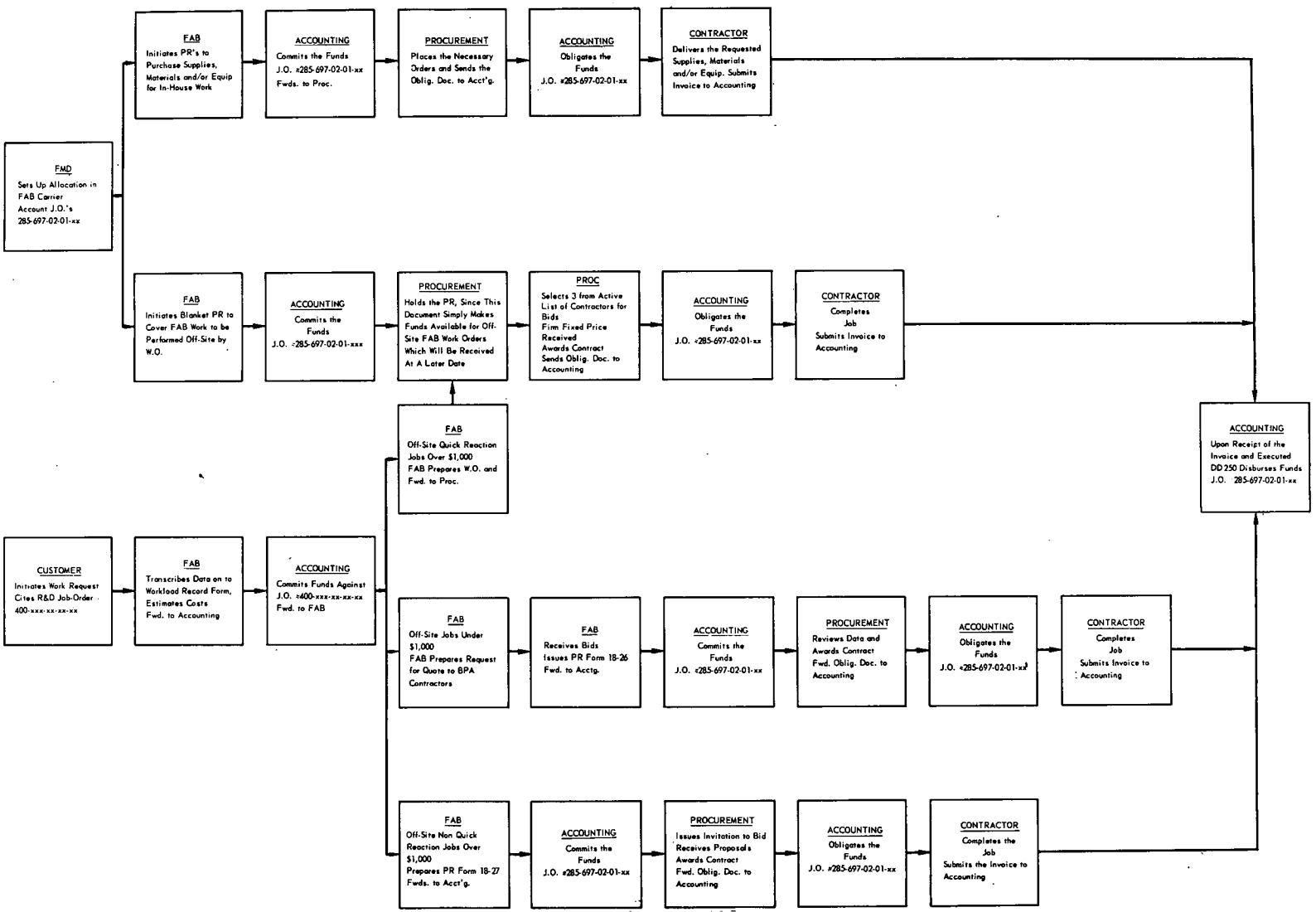
At the end of the month, Business Data Branch charges back to the users accounts the outstanding obligations and disbursements in the carrier account. They also make negative entries in the FMD reciprocal account for the amount of the charge backs. The FMD reciprocal account also reflects as a negative figure the amount of outstanding commitments in the users accounts after the charge backs have been made.

Note: (1) The amount of charge backs (outstanding obligations and disbursements in the Fab carrier account) will not exceed the amount available in the users accounts.

(2) The charge back will not affect the balances in the carrier account.

(3) The charge backs will be made monthly for each fiscal year's account, until the account is cleared out.

FAB CARRIER ACCOUNT OPERATION (EXCLUDING CHARGE BACK SYSTEM)



FAB CHARGE-BACK PROGRAM

At the end of each month, the Business Data Branch runs the Fab charge-back program. The purpose of this program is to charge to the customers the costs of the Fab operation both on-site and off-site during the month. The program operates as follows:

First Month: (See Attachment I)

1. Runs the 1505 Report: This report lists by customer PCN, JO number and estimated costs for all the Fab work requests committed during the month. The total on this report in essence represents the current months income to the Fab Division.

2. Takes from the 1094 Report the total amount of obligations (outstanding obligations and disbursements) in the Fab carrier account and charges them back against the customers outstanding commitments, thereby creating obligations in the customers accounts. The program then records the amount charged back as a negative obligation in the FMD reciprocal account.

3. Takes from the 1094 Report the total amount of disbursements in the Fab carrier account and charges them back against the customers outstanding obligations, thereby creating disbursements in the customers accounts. The program then records the amount charged back as a negative disbursement in the FMD reciprocal account.

4. Records the amount of outstanding commitments remaining in the customers accounts, after the charge-backs, as a negative commitment in the FMD reciprocal account.

Subsequent Months: (See Attachment II)

1. Same as first month.

2. Takes from the 1094 Report the current month's obligations and any obligation not charged back during the previous month in the Fab carrier account and charges them back against the customer's outstanding commitments from the previous month and current month commitments, thereby creating obligations in the customers accounts. The program then records the current month charge-back as a negative obligation in the FMD reciprocal account.

3. Takes from the 1094 Report the current month's disbursements not charged back during the previous month in the Fab carrier account and charges them back against the customer's outstanding obligations, thereby creating disbursements in the customers accounts. The program then records the amount charged back as a negative disbursement in the FMD reciprocal account.

4. Same as first month.

ATTACHMENT I

FAB CHARGE BACK PROGRAM
FIRST MONTH

	Allocation	Avail. Bal.	Commitments	Obligations	Disbursements
Customer Accounts					
Current Month Commitments	5,100,000	4,620,000	480,000		
Oblig. Chg. Back			(315,000)	315,000	
Disb. Chg. Back				(25,000)	25,000
Balances End of 1st Month			165,000	290,000	25,000
Fab Carrier Accounts					
EOM Balances on 1094	4,700,000	4,310,000	75,000	290,000	25,000
FMD Reciprocal Account					
Oblig. Chg. Back				(315,000)	
Disb. Chg. Back				25,000	(25,000)
Out. Comm. in Cust. Accounts			(165,000)		
Balance End of 1st Month		480,000	(165,000)	(290,000)	(25,000)

ATTACHMENT II

FAB CHARGE BACK PROGRAM
SUBSEQUENT MONTHS

	Allocation	Avail. Bal.	Commitments	Obligations	Disbursements
Customer Accounts					
Current Months Commitments		(370,000)	370,000		
Balances End of 1st Month	5,100,000	4,620,000	165,000	290,000	25,000
Oblig. Chg. Back			(500,000)	500,000	
Disb. Chg. Back				(380,000)	380,000
Balance End of 2nd Month	5,100,000	4,250,000	35,000	410,000	405,000
Fab Carrier Accounts					
Current Months Transactions		(450,000)	(50,000)	120,000	380,000
1094 Balances Previous Month	4,700,000	4,310,000	75,000	290,000	25,000
EOM Balances on 1094	4,700,000	3,860,000	25,000	410,000	405,000
FMD Reciprocal Account					
Balance End of 1st Month				(290,000)	(25,000)
Oblig. Chg. Back				(500,000)	
Disb. Chg. Back				380,000	(380,000)
Out. Comm. in Cust. Account			(35,000)		
Balance End of 2nd Month		860,000	(35,000)	(410,000)	(405,000)

TYPES OF BUSINESS DATA REPORTS

Report #1505

This report is run once a month by the Business Data Branch, at the end of the month and shows the current month Fab work requests committed against the customer's job orders. (See Attachment A.)

Report #1872

This report shows the current month transactions within the Fab carrier account. This run also shows the status of the carrier account as of the date which it was run, based on transactions which have been processed through the fiscal system as of that date. (See Attachment B.)

Report #1900

This report is run once a month after the charge backs have been made and shows the unliquidated commitments and obligations by PCN and JO against the customers accounts. (See Attachment C.)

Report #1094

This report shows the fiscal status of each job order involved in the Fab Carrier Account System. (See Attachment D.)

CURRENT MONTH WORK REQUESTS COMMITTED — REPORT 1505

DURING MONTH ENDING 09/28/71

P C N	JOB ORDER	DESCRIPTION	DATE	CAT	SHOP CONTROL NO.	IN-HOUSE AMOUNT	COMMERCIAL AMOUNT
810-45200-0026	810-311-02-31-01	BRACKET AND S	09/10/71	K	36646		128.00
810-45200-0027	810-311-02-31-01	BRACKETS	09/11/71	K	36672	128.00	
810-45200-0028	810-311-02-31-01	COVERS	09/24/71	K	36743		564.00
810-45200-0029	810-311-02-31-01	STNADRS	09/22/71	K	36727		640.00
810-45200-0031	810-311-02-31-01	BRACKET	09/17/71	K	36763	128.00	
810-45200-0032	810-311-02-31-01	BACKETS	09/28/71	K	36803	64.00	
810-45200-0033	810-311-02-31-01	PLATES	09/28/71	K	36805	64.00	
841-48000-0030	840-311-06-43-01	7 FILTERS	09/11/71	K	36591		225.00
841-48000-0031	840-311-06-43-01	BRACKETS	09/03/71	K	36599		200.00
841-48000-0033	840-311-06-43-01	BKTSPSTRAPS	09/03/71	K	36601		912.00
841-48000-0036	840-311-06-43-01	RACKS	09/22/71	K	36734		130.00
841-48000-0038	840-311-06-43-01	COVERS	09/22/71	K	36776	128.00	
			SUB-TOTALS			74,388.00	396,490.00
			TOTAL				470,878.00

ATTACHMENT 3
REPORT 1871

CARRIER ACCOUNT 697-02

FISCAL YEAR 1972

CURRENT MONTH TRANSACTIONS AND AVAILABLE BALANCES

AS OF SEP 28,1972

JOB ORDER NUMBER	OUTSTANDING COMMITMENTS	CURRENT MONTH OBLIGATIONS	CURRENT MONTH DISBURSEMENTS	AVAIL BALANCE
280-697-02-01-02			$1,797.11	$22,020.57
281-697-02-01-02	$1,837.67	$810.00	$304.42	$134,719.85
282-697-02-01-02	$1,855.00	$221.75	$1,387.29	$44,984.18
283-697-02-01-02	$6,355.00	$7,737.29	$341.46	$47,336.83
284-697-02-01-02	$38,401.00	$2,405.28	$112.35	$111,746.58
285-697-02-01-01	$201,967.93	$162,036.80	$103,839.38	$2,934,453.56
285-697-02-01-02	$21,853.66	$16,316.74	$6,080.53	$189,491.49
290-697-02-01-28	$20,683.00	$11,642.25	$8,674.33	$48,992.30
310-697-02-01-53				
TOTAL 697-02	$292,953.26	$201,170.11	$122,536.87	$3,533,745.30
AMOUNT OBLIGATIONS TO CUSTOMER COMMITMENTS		$323,706.98		
AMOUNT DISBURSEMENTS TO CUSTOMER OBLIGATIONS			$122,536.87	
AMOUNT CREDIT OBLIGATIONS TO 210-697-02-01-01		$201,170.11		
AMOUNT CREDIT DISBURSEMENTS TO 210-697-02-01-01			$122,536.87	
AMOUNT CUSTOMER ACCOUNT COMMITMENTS OUTSTANDING	$351,563.71			
EFED EXPENSES NOT CHARGED TO CUSTOMER ACCOUNTS	$292,953.26			
DIFFERENCE-PREPAYMENTS OVER EXPENSES	$58,610.45			

AS OF SEP 28,1971 REPORT # 1900
RUN 70272 PAGE # 16

FISCAL YEAR 1972

UNLIQUIDATED REG -FAB- OBLIGATIONS AND COMMITMENTS
-PREPAYMENTS MADE BY GFEQ CUSTOMERS-

JON	PCN	DATE	OBLIGATIONS	COMMITMENTS
764630217507	1764415100004	700717	$ 216.00	
764630217507	1764415100005	700717	$ 128.00	
764630217507	1764415100006	700717	$ 192.00	
800311023101	1800437020002	700717	$ 1,500.00	
810311023101	1810452000001	700717	$ 300.00	
810311023101	1810452000002	700717	$ 250.00	
810311023101	1810452000003	700717	$ 960.00	
810311023101	1810452000004	700717	$ 920.00	
810311023101	1810452000005	700717	$ 700.00	
810311023101	1810452000006	700721	$ 280.00	
810311023101	1810452000007	700723	$ 3,000.00	
810311023101	1810452000007	700728	$ 800.00	
810311023101	1810452000008	700717	$ 320.00	
810311023101	1810452000009	700807	$ 1,024.00	
810311023101	1810452000010	700728	$ 300.00	
810311023101	1810452000011	700728	$ 248.00	
810311023101	1810452000012	700723	$ 352.00	
810311023101	1810452000013	700727	$ 256.00	
810311023101	1810452000014	700727	$ 816.00	
810311023101	1810452000015	700807	$ 400.00	
810311023101	1810452000016	700812	$ 288.00	
810311023101	1810452000017	700825	$ 1,000.00	
810311023101	1810452000019	700821	$ 1,304.00	
810311023101	1810452000020	700827	$ 256.00	
810311023101	1810452000021	700908		$ 700.00
810311023101	1810452000022	700908		$ 144.00
810311023101	1810452000023	700916		$ 145.00
810311023101	1810452000024	700916		$ 140.00
810311023101	1810452000026	700910		$ 128.00
810311023101	1810452000027	700911		$ 128.00
810311023101	1810452000028	700924		$ 564.00
810311023101	1810452000029	700922		$ 640.00
810311023101	1810452000031	700917		$ 128.00
810311023101	1810452000032	700928		$ 64.00
810311023101	1810452000033	700920		$ 64.00
810312020121	1810443130001	700731	$ 24,900.00	
810312020121	1810443130002	700821	$ 1,706.00	
810312020121	1810443130003	700925		$ 21,000.00
810312020121	1810443140001	700727	$ 12,000.00	
810312020121	1810443140002	700821	$ 919.00	
810312020121	1810443640001	700917		$ 600.00
810312021420	1810443180001	700807	$ 292.00	
810312021420	1810443230001	700807	$ 200.00	
810312021420	1810443480001	700820	$ 250.00	
810312021420	1810443490001	700820	$ 200.00	
810312021420	1810443500001	700820	$ 240.00	

Fiscal Year 1972

UNLIQUIDATED R&D -FAB- OBLIGATIONS AND COMMITMENTS
-PREPAYMENTS MADE BY GFED CUSTOMERS-

JON	PCN	DATE	OBLIGATIONS	COMMITMENTS
810312021823	1810443520001	700901	$ 22,000.00	
810312021823	1810443530001	700901		$ 89,847.71
810312021823	1810443530001	700901	$ 10,152.29	
820311023101	1820462000001	700717	$ 176.00	
820311023101	1820462000010	700812	$ 120.00	
840311064301	1841480000015	700721	$ 640.00	
840311064301	1841480000025	700817	$ 96.00	
840311064301	1841480000026	700817	$ 96.00	
840311064301	1841480000028	700814	$ 320.00	
840311064301	1841480000030	700911		$ 225.00
840311064301	1841480000031	700903		$ 200.00
840311064301	1841480000033	700909		$ 912.00
840311064301	1841480000036	700922		$ 110.00
840311064301	1841480000038	700922		$ 128.00
		TOTALS	$ 770,022.49	$ 351,563.71

MON$$ END TODAYS DATE - TUESDAY SEPTEMBER 29, 1970

FISCAL NOV GRP 01 PROCESSED 71-11-02 AS OF 11-02 FISCAL YR 71 R D REG - CARRIER STATUS REPORT PAGE 806 RPT 1094A

	ALLOC	AVAIL BAL	COMMIT	OBLIG	DISB	PLAN DOC	COST	ACCRUAL
210-697-01-01-04		157,052.65			157,052.65-		157,053-	
251-697-01-01-01	175,000	9,000.00	90,000.00	76,000.00				
252-697-01-01-01	10,000	947.16		9,052.84				
253-697-01-01-01	200,000	139,724.46		60,275.54				
253-697-01-01-02	35,000			35,000.00				
253-697-01-01-03	30,000	25,448.85		4,551.15				
253-697-01-01-04	5,000	2,500.00		2,500.00				
253-697-01-01-05	1,000	700.00		300.00				
253-697-01-01-06	8,000	86.00		7,914.00				
254-697-01-01-01	425,000	163,981.02		165,079.68	95,939.30		95,939	
254-697-01-01-02	200,000	82,983.27	62,915.03	10,084.97	44,016.73		44,017	
254-697-01-01-03	70,000	34,000.00	6,000.00	24,736.81	5,265.19		5,265	
254-697-01-01-04	48,000	12,917.23		23,251.34	11,831.43		11,831	
255-697-01-01-01	100,000	75,297.21		24,702.79				
255-697-01-01-02	50,000	31,311.58		18,688.42				
255-697-01-01-03	60,000	43,370.34		16,629.66				
255-697-01-01-04	100,000	76,298.09		23,701.91				
255-697-01-01-05	80,000	50,378.50		29,621.50				
255-697-01-01-06	100,000	58,484.13		41,515.87				
255-697-01-01-07	85,000	60,013.99		24,986.01				
255-697-01-01-08	85,000	59,151.86		25,843.14				
255-697-01-01-09	150,000	95,359.67		54,640.33				
255-697-01-01-10	100,000	76,238.69		23,761.31				
255-697-01-01-11	50,000	33,031.25		16,968.75				
255-697-01-01-12	5,000		5,000.00					
255-697-01-01-13	25,000	20,437.67		4,562.33				
255-697-01-01-14	40,000	21,023.00		18,977.00				
697-01-01	2,237,000	1,329,736.62	163,915.03	743,348.35	-		-	
697-01	2,237,000	1,329,736.62	163,915.03	743,348.35				
210-697-02-01-01		1,335,056.72	302,659.77-	770,022.45-	262,374.50-		262,375-	
280-697-02-01-02S	24,000	21,751.83			2,248.17		2,248	
281-697-02-01-02S	138,000	131,742.26	2,364.92	3,110.84	781.98		804	22.00
CURRENT			236.62					
282-697-02-01-02S	51,000	41,860.43	3,334.00	2,445.13	3,359.44		3,366	7.00
CURRENT			90.00					
283-697-02-01-02S	62,000	49,177.90	545.70	9,545.44	2,729.96		3,205	475.00
CURRENT			55.00					
284-697-02-01-02S	148,000	95,218.48	39,468.05	12,075.61	1,236.86		1,237	
285-697-02-01-01	3,960,000	2,454,790.21	287,441.35	988,323.74	229,444.70		229,445	
CURRENT			3,804.75					
285-697-02-01-02S	252,000	176,268.97	10,751.62	50,886.55	14,092.86		14,093	
CURRENT			485.34					
290-697-02-01-28	95,000	48,992.22		37,325.25	8,682.53		8,683	
697-02-01	4,730,000	4,354,859.02	41,245.87	333,693.11	202.00		706	504.00
CURRENT			4,671.71					
697-02	4,730,000	4,354,859.02	41,245.87	333,693.11	202.00		706	504.00
697-02			41,245.87	333,693.11	202.00		706	504.00

MANAGEMENT CONTROLS ON THE FAB CARRIER ACCOUNT

Fab Division

a. Submit semi-annually to the Budget Branch an operating plan, in the form of 10-6's or marked up operating plan as required.

b. Will not authorize any work to begin on Fab requests until a valid commitment ticket is received from the Accounting Branch.

c. Review at least quarterly the actual costs of off-site Fab work vs. the in-house estimates, to assure that the customer is paying his fair share or is not being over charged.

d. Accumulates the necessary information required as input to the FMD for the monthly status of Fab Carrier Account Report. (Attachment E)

e. Submits all requests for the purchase of equipment to the Financial Management Officer for approval.

Financial Management Division

a. Reviews the Fab Division's Budget input and upon approval of the budget by the Director of A&M sets up the JO allocations for the Fab Carrier Account.

b. Reviews and approves all procurements for the purchase of Fab equipment.

c. Prepares monthly for presentation to the Chief of the Experimental Fabrication and Engineering Division, the status of Fab Carrier Account Report.

d. Toward the end of the fiscal year, establishes a cut off date for Fab work requests. After this date, Accounting will not process any Fab commitments against the users accounts, until the beginning of the next fiscal year.

A&M Directorate

Will review and approve semi-annually the EFED Budget.

ATTACHMENT E

STATUS OF FAB CARRIER ACCOUNT

AS OF _____

Income (Funds committed against users accounts)		═══
Expenses:		
Commitments against the Fab Carrier Account	___	
*Fab Procurement Requests in process		___
Fab Work Orders in process	___	___
Less: Balance on blanket PR	___	___
*Unfilled off-site customer's orders		___
TOTAL EXPENSES		═══
FAB CARRIER ACCOUNT SURPLUS (DEFICIT)		═══

*Provided by Fab Division

Appendix E

TECHNICAL INFORMATION SERVICES

INTRODUCTION

The purpose of the Technical Information Service function is to provide the following services to the Center, both by in-house performance as well as by contractual relations with commercial concerns. These services are:

Printing
Chart and Art Work
Photographic Services
Composition Services
Editorial and Writing Services
Translation Services

It is the policy of Goddard Space Flight Center that all costs for Technical Information Services be charged directly to Research and Development Projects and Research and Program Management functions as appropriate.

BACKGROUND

Prior to NASA establishment of carrier accounts, all contractual costs incurred by the Technical Information Services function were initially charged to the Research and Program Management Appropriation. Upon receipt of monthly billings from contractors for services performed, the billings were forwarded to Technical Information Services for analysis and determination of proper distribution to applicable Research and Development and Research and Program Management job orders. This system placed an undue financial burden on a severely constrained Research and Program Management Appropriation in that initially the total amount of financing was charged to this appropriation (which is an annual appropriation); therefore, the amounts so used, pending distribution to Research and Development, were not available early in the year to finance items previously approved in Goddard's Research and Program Management Operating Budget. As a result, during the months of May and June of each year, excessive monitoring was required to expedite contractor submission of vouchers, make payments, determine as close as possible how much funding would be required for contract services for the balance of the fiscal year and, if possible, deobligate any excess funds immediately.

This system was greatly improved by implementation of the Common Use Service Carrier Account which allowed us to finance all Technical Information Service contracts providing common service to all appropriations from the Research and Development Appropriation. As most of the charges are ultimately charged to Research and Development, the effort required in May and June to determine the amount of funds which must be reserved in Research and Program Management for its fair share of costs was reduced greatly.

BUDGET

Under the Common Use Carrier Account concept, the management of the Technical Information Services function is required to prepare a detailed operating budget for presentation to the Director of Administration and Management each semiannual budget period. This budget includes all costs which are to be financed by use of the carrier account.

To assist the manager of Technical Information Services in determining funding requirements, the Financial Management Division provides him with all budget estimates which are included in all Research and Development and Research and Program Management budgets for Technical Information Services. All elements of Goddard are required to budget separately using discrete job order numbers for the various Technical Information Services. Goddard's accounting system relates all actual charges incurred to these budget line items as a historical reference tool for budgeting purposes.

COSTS FINANCED

All of the following contractual costs associated with Technical Information Services are financed by use of the carrier account:

Printing
Chart and Art Work
Photographic Services
Composition Services
Editorial and Writing Services
Translation Services

COSTS EXCLUDED

All costs associated with Government salaries, benefits, travel, and cost of supplies and materials and equipments required for Technical Information

Services performed in-house with Government employees are excluded from the carrier account and are financed by the Research and Program Management Appropriation.

CENTER MANAGEMENT REVIEW AND APPROVAL

Every June and December management of the Technical Information Services presents its budget requirements to the Director of Administration and Management for review/modification and approval. This budget is presented for both the Research and Program Management Appropriation and the Carrier Account.

FUND AUTHORIZATION

As discussed previously under "Method of Financing," page 3, NASA's financing system does not require receipt of Headquarters Resources Authority Warrants (506) but authorizes field centers to finance costs of Common Use Service Carrier Accounts from residual or available Allotment Authorizations (504's). NASA's financial procedures do, however, require that all research- and development-funded carrier accounts be identified by a unique project number. In Goddard's case we must use Unique Project Number 697 for research and development financed carrier accounts for common services. In order to distinguish each of our functions in the Common Use Service Carrier Account, we have assigned two additional digits to the account number; i.e., Common Use Service Carrier Account — UPN 697-__, Technical Information Services UPN 697-01. In addition, for Technical Information Services we have added two additional digits (sub-project) to separately identify each type of service; i.e., Printing 697-01-01.

METHOD OF DISTRIBUTION

The method used to distribute costs of the Technical Information Services financed under the Carrier Account is actual contractual costs incurred by the contractor in fulfilling the work request of the originating divisions.

Originating divisions are not authorized to enter into separate contractual arrangements for Technical Information Services as listed under the section entitled "Costs Financed." They must submit work requests to the management of the Technical Information Services function who will determine if the service can be performed in-house with existing personnel or must be contracted to

industry. The request for services must cite a job order to which the cost of the service can be charged. Prior to accepting the request, the job order is checked for validity. If the job order isn't valid, the request will not be accepted. If services are performed in-house, there is no charge to the user. However, if the service must be contracted out, the contractor costs are related to the work request, and upon receipt of the contractor billing they are charged to the applicable Research and Development, Research and Program Management, or Construction of Facilities job order. (See Flow Chart attached.)

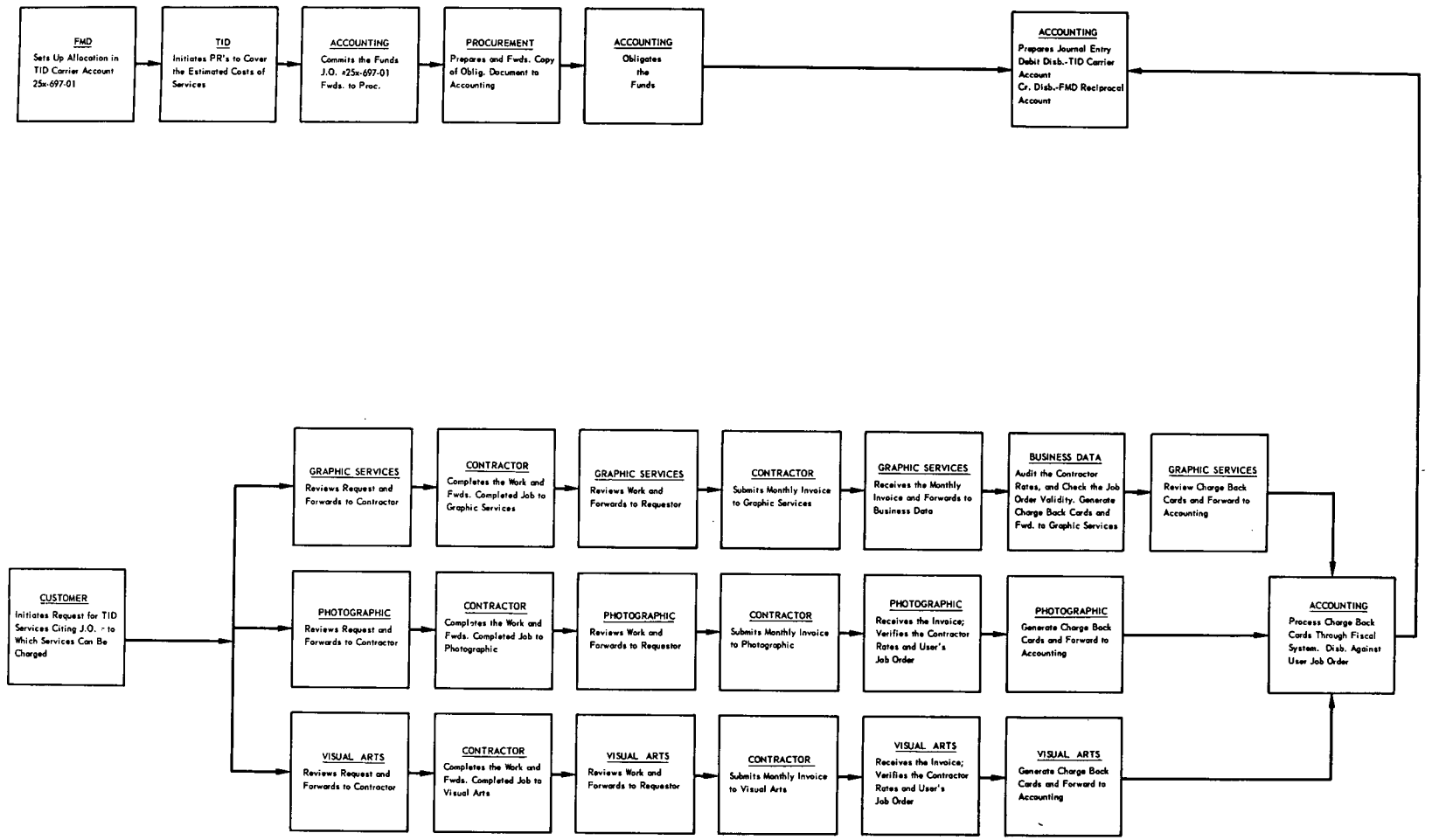
MANAGEMENT REPORTING

Management budgeting and reporting of costs of the Technical Information Services has greatly improved with the financing of the function by utilization of the carrier account and establishment of a separate unique project number for the function 697-01.

Initial obligations, in the order of $3,000,000 per annum, related to the function are charged to UPN 697-01 financed through the Research and Development no-year appropriation and not the Research and Program Management, an annual appropriation which is provided to the Center in quarterly increments. Hence, Research and Program Management funds are available for purchase of items previously approved by Center Management.

Complete financial status can be presented to management of Technical Information Services on one page. See typical status report which can be prepared daily, weekly, monthly as desired as displayed under Test Operations Section.

TECHNICAL INFORMATION SERVICES-CARRIER ACCOUNT



Appendix F

STORE STOCK AND MAGNETIC TAPE

INTRODUCTION

The purpose of the Stockroom Operation is to supply the organizational entities within GSFC, common use supplies, and materials needed in their daily operation.

It is the policy of Goddard Space Flight Center that the costs of these supplies be charged directly to Research and Development Projects and Program Management functions as appropriate when withdrawn from the stockroom.

BACKGROUND

Prior to the establishment of carrier accounts by NASA, the purchase of common use supplies and materials was a very cumbersome operation, since various job orders had to be cited on the same purchase request. This type of operation caused much unnecessary bookkeeping and improper allocation of costs.

With the advent of the R&D Inventory Carrier Account all purchases are made out of one job order number and costs charged to the appropriate R&D Project and Program Management Function as withdrawals are made from the stock room.

COSTS FINANCED

The costs associated with the purchase of common use supplies and materials and magnetic tape are initially financed by use of the R&D Inventory Carrier Account with ultimate charge to R&D Projects and Program Management Functions.

COSTS EXCLUDED

All costs associated with government employees salaries, benefits, travel, and operation of the stockroom are excluded from the carrier account and are financed by the Research and Program Management appropriation.

FUND AUTHORIZATION

As discussed previously under "Method of Financing", page 3, NASA's financing system does not require receipt from Headquarters of Resources Authority Warrants (NASA Form 506) but authorizes field centers to finance costs of Carrier Accounts from residual or available Allotment Authorizations (NASA Form 504). NASA's financial procedures do, however, require that all research and development funded Carrier Accounts be identified by a unique project number (UPN). In Goddard's case, we must use Unique Project Number 698-___; Issuance from the Warehouse 698-01; Issuance from Self-service Store 698-02, etc.

SETTING UP ALLOCATION

The Financial Management Division in the beginning of the fiscal year sets up an allocation in the R&D Inventory Carrier Account. This allocation is based upon the previous years inventory purchases.

METHOD OF DISTRIBUTION

The method used to distribute the charges from the carrier account is as follows:

Store Stock Carrier Account:

The requestor initiates a Request for Supplies on GSFC Form 20-7 citing a job order to which the supplies can be charged. The job order is checked for validity prior to the issuance of the supplies. When the supplies ordered are issued, a disbursement is recorded in the users account, with offsetting entries in the FMD reciprocal account. Under the carrier account concept, disbursements are not recorded against the user's job order until the supplies have been issued.

Self-Service Store

The supplies issued to the self-service store are recorded as a disbursement in the Self-Service Store carrier account and a negative disbursement made in the Store Stock Carrier Account. In essence, the Store Stock Carrier Account issues the supplies to the Self-Service Store who in turn issue them to the users. When the Self-Service Store issues the supplies to the user, a disbursement is recorded against the users job order and an offsetting negative disbursement is recorded in the FMD reciprocal account. Under the carrier account concept, disbursements are not recorded against the user's job order until the supplies have been issued.

MANAGEMENT REPORTING

Under the Carrier Account concept, management reporting has greatly improved. Under this concept all purchases are made from the same job order and all issuances are recorded by supply point.